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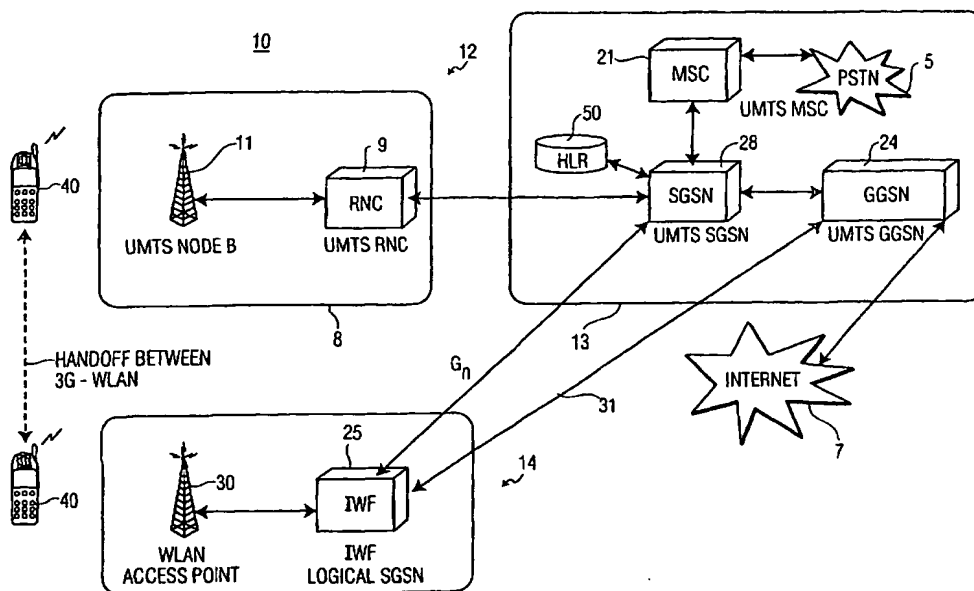
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| <p><b>(51) International Patent Classification<sup>7</sup>:</b> <b>H04J 3/16</b></p> <p><b>(21) International Application Number:</b> PCT/US03/16714</p> <p><b>(22) International Filing Date:</b> 28 May 2003 (28.05.2003)</p> <p><b>(25) Filing Language:</b> English</p> <p><b>(26) Publication Language:</b> English</p> <p><b>(30) Priority Data:</b><br/>60/386,319 6 June 2002 (06.06.2002) US</p> <p><b>(71) Applicant (for all designated States except US):</b> <b>THOMSON LICENSING S.A.</b> [FR/FR]; 46, Quai A. Le Gallo, F-92648 Boulogne (FR).</p> <p><b>(72) Inventors; and</b><br/> <b>(75) Inventors/Applicants (for US only):</b> <b>VERMA, Shaily</b> [IN/IN]; A-305 Glengate, Hiranandani Gardens, Powai, Mumbai 400 076 (IN). <b>WANG, Charles, Chuanming</b> [US/US]; 1504 Spearmint Circle, Jamison, PA 18929 (US).</p> | <p><b>(74) Agents:</b> <b>TRIPOLI, Joseph, S</b> et al.; c/o Thomson Licensing, Inc., Two Independence Way, Princeton, NJ 08540 (US).</p> <p><b>(81) Designated States (national):</b> AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.</p> <p><b>(84) Designated States (regional):</b> ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published:</b><br/>— <i>with international search report</i></p> |
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*[Continued on next page]*

**(54) Title: WLAN AS A LOGICAL SUPPORT NODE (SGSN) FOR INTERWORKING BETWEEN THE WLAN AND A MOBILE COMMUNICATIONS SYSTEM**



**(S7) Abstract:** An interface (28) for connecting networks includes an interworking function provided between a wireless local area network (WLAN) (8, 14) and a Public Mobile Land Network (PLMN) (13) to provide communication interactions between the PLMN (13) and the WLAN (8, 14). The interworking function includes a dual-protocol stack, which interfaces the WLAN protocols and PLMN protocols to provide seamless communications between the WLAN (8, 14) and the PLMN (13) such that an increase in available service bandwidth provided for users of the PLMN is maintained.

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— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/16714

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
IPC(7) : H04J 3/16 US CL : 370/466		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 370/466, 465, 467, and 469		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, E	US 2003/0139180 A1 (MCINTOSH et al) 24 July 2003, page 4, paragraphs 50-52.	1-18
X, P	US 6,542,516 B1 (VIALEN et al) 01 April 2003, column 4, lines 20-49.	1-6, 10, and 13-17
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Y, P		1 and 2
Y	EP 1 146 691 A1 (MORGANTI et al) 17 October 2001, page 6, lines 31-40.	1 and 2
A, P	US 2002/0110104 A1 (SURDILA et al) 15 August 2002, see entire document.	1-18
A, E	US 2003/0119481 A1 (HAVERINEN et al) 26 June 2003, see entire document.	1-18
A	WO 98/53576 A2 (MONRAD) 26 November 1998, see entire document.	1-18
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